NOTES ON THE GENUS DIKRANEURA IN THE UNITED STATES (HOMOPTERA; EUPTERYGIDAE).

By W. L. McAtee.

The following notes resulting from intermittent study of this genus extend knowledge of the ranges of seven species and add one new species and two new varieties to the list of described forms.

D. maculata Gillette.—Louisiana (C. F. Baker, U. S. N. M.); Church's Id., N. C., Oct. 17, 1918, on hackberry, W. L. McAtee; Chain Bridge, Va., April 23, 1922, J. R. Malloch; Plummers Id., Md., Sept. 14, Oct. 12, 26, 1913, July 19, Sept. 13, 1914, W. L.

McAtee.

D. cruentata Gillette.—The principal color vittae of this species vary from scarlet to pale yellow. The holotype (N. Y., No. 2046, U. S. N. M.) lacks markings on the head and thorax, has the vittae on tegmen distinct, and dusky band over cross-veins broad. I group with this those forms having color vittae present on vertex and pronotum, and the angles of the scutellum spotted.

Two other color varieties appear to be worth naming.

Dikraneura cruentata lavata, new variety.

Practically no color markings, sectors near cross-veins and latter in part dark.

Plummers Id., Md., Sept. 14, 1913 (♂ holotype), Windy Run, Va., Oct. 16, 1921, W. L. McAtee.

Dikraneura cruentata rubricata, new variety.

Scutellum entirely red, red markings on tegmen broader and smoky band in front of crossveins more conspicuous than usual in the species.

Virginia near Plummers Id., Md., Sept. 5, 1915, W. L. McAtee (holotype ?); paratypes Chain Bridge, Va., Oct. 2, 1921, J. R. Malloch.

The foregoing data extend the recorded distribution of the species and we may mention also specimens of the typical variety from Onaga, Kans., F. F. Crevecoeur, and Los Angeles, Calif.,

D. W. Coquillett.

D. unipuncta Gillette.—The color vittae vary from greenish yellow, through yellow to red in this species. Records extending the published distribution are: Verde Vallev, Ariz., Sept. 20, 1922, H. R. Brisley; Graham Mts., Ariz. (Ash Creek, 3200 ft.), July 4, 1914, E. G. Holt; Utica, Miss.; Alabama (C. F. Baker); and Biscayne Bay, Fla. (U. S. N. M. except second record Biol. Survey).

D. abnormis Walsh.—The color markings of this species also vary from red to yellow, and in both cases individuals occur that

lack markings except on tegmina. The variety rufula Gillette applies to a type of color variation which it is inexpedient to

name in this family.

D. cockerelli Gillette.—The tegminal venation and color of this species is very distinctive; the conspicuous black spot although it lies in an area of the tegmen which would be enclosed between the 3d and 4th sectors if produced, and it would seem could more naturally fall in the 3d apical cell, nevertheless is in the 4th apical cell, the boundary of which seems stretched for the precise purpose of enclosing this spot. The species like most of the family varies in markings from red to yellow. Specimens of both the red and yellow types are at hand from Higley, Ariz., July 18, 1917, and Graham Mts., Ariz. (Ash Creek, 3200 ft.), June 19, July 4, 1914, E. G. Holt.

D. kunzei Gillette.—Numerous specimens from the Graham Mts., Ariz. (Ash Creek, 3200 ft.), May 30, June 15, 21, 25, 1914, E. G. Holt; (Biol. Survey) also from Victoria, Texas, July 29, 1903, and Aug. 15, 1915, the latter labelled as defoliating huisache, collected by J. D. Mitchell (U. S. N. M.). I would not say of these as does the original description that the vertex and scutellum lack distinct markings. The reddish markings on these areas and upon front of pronotum also have a real

pattern.

D. carneola Stal.—When the color of tegmina is not solid it is seen to consist essentially of vittae along the sectors. These vary in color from pinkish red to golden, sordid, and paler tones of green. The vertex in this species is much shorter than in the sometimes similarly colored D. abnormis Walsh. Numerous specimens from Willard, Utah, October 5, 1914; Promontory, Utah, Oct. 6, 1914; Mouth of Bear River, Utah, Sept. 30, 1914, Ogden, Utah, May 16, 1915, Bountiful, Utah, Aug. 2, 1914; Emigration Canyon, Utah, Aug. 9, 1914; Chiricabua Mts., Ariz., (Barefoot Pass, 8000 feet) July 3, 1919, Alex. Wetmore; Portland, Ore., June 6, 1915, A. K. Fisher, (Biol. Survey).

D. fieberi Loew. - Woodstock, Vt., A. P. Morse (M. C. Z.)

Dikraneura mera, new species.

General color milky white, the eyes brownish and the clavus, tip of ovipositor, and small wedge-shaped spot on each tegmen at end of first sector black; tegmen whitish-hyaline, costal plaques milky. Length: 3 mm. The position of black spots on the tegmina of various species of Dikraneura is quite constant and characteristic; the present species has the spots in a different position from any of the previously described species of the United States.

Holotype 9, Beltsville, Md., June 23, 1918, on Quercus alba, W. L. McAtee.